



Zoonotic mosquito-borne flaviviruses: Worldwide presence of agents with proven pathogenicity and potential candidates of future emerging diseases

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Year: 2010
Journal: Veterinary Microbiology. 140 (4-Mar): 271-280

Abstract:

An update on the mosquito-borne flavivirus species including certain subtypes, as listed in the Eighth Report of the International Committee on Taxonomy of Viruses, is given. Special emphasis is placed on viruses which have been shown to cause diseases in animals, and viruses for which no pathogenicity has been proven yet. Several recent examples (Usutu virus and lineage-2 West Nile virus in central Europe, Zika virus in Micronesia) have shown that sources providing information on such scientifically largely neglected viruses are valuable tools for scientists and public health officials having to deal with such disease emergencies. Furthermore the effects of global warming will lead to introduction of competent mosquito vectors into temperate climate zones and will increase efficiency of viral replication in less competent vector species. This, facilitated by rising global travel and trade activities, will facilitate introduction and permanent establishment of mosquito-borne viruses, some of which may become of public health or veterinary concern, into novel environments, e.g. industrialized countries worldwide.

Source: <http://dx.doi.org/10.1016/j.vetmic.2009.08.025>

Resource Description

Exposure : ☒

weather or climate related pathway by which climate change affects health

Unspecified Exposure

Geographic Feature: ☒

resource focuses on specific type of geography

None or Unspecified

Geographic Location: ☒

resource focuses on specific location

Global or Unspecified

Health Impact: ☒

specification of health effect or disease related to climate change exposure

Infectious Disease

Climate Change and Human Health Literature Portal

Infectious Disease: Vectorborne Disease

Vectorborne Disease: Mosquito-borne Disease

Mosquito-borne Disease: Dengue, Viral Encephalitis, Viral Encephalitis, Viral Encephalitis, West Nile Virus, Yellow Fever, Other Mosquito-borne Disease

Mosquito-borne Disease (other): flaviviruses

Resource Type: ☒

format or standard characteristic of resource

Review

Timescale: ☒

time period studied

Time Scale Unspecified